Small Business Innovation Research/Small Business Tech Transfer

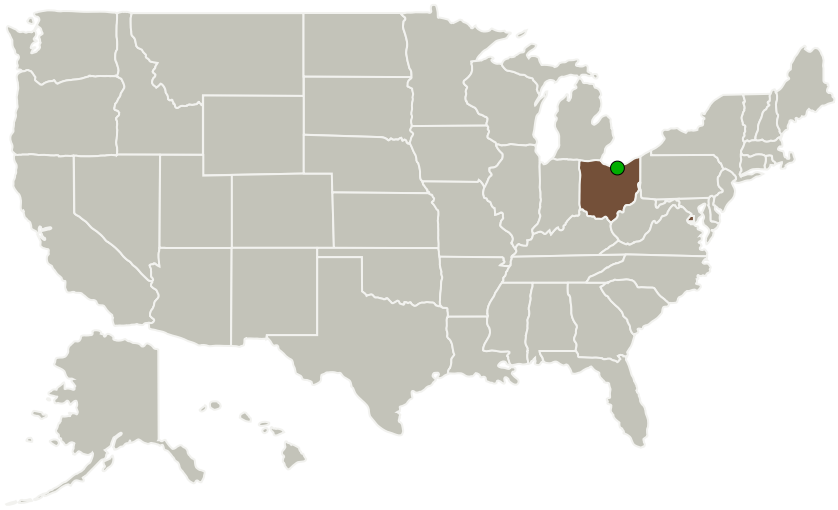
Integrated Powerhead for Methane Propulsion Systems, Phase I

Completed Technology Project (2017 - 2017)

Project Introduction

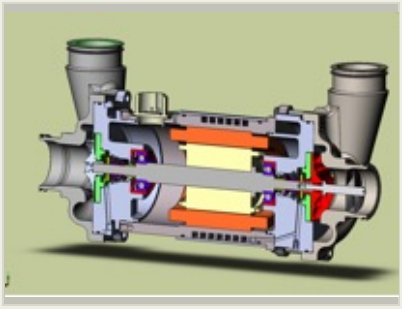
Development of an electric powerhead or Electropump for a 25,000 lb class Methane engine. Components for integrated RCS (~100-lb class) and Main Propulsion System (MPS) (25,000-lb class) feed systems (utilizing common propulsion tanks)"

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
TGV Rockets, Inc.	Lead Organization	Industry Small Disadvantaged Business (SDB)	Washington, District of Columbia
Glenn Research Center(GRC)	Supporting Organization	NASA Center	Cleveland, Ohio

Primary U.S. Work Locations	
District of Columbia	Ohio



Integrated Powerhead for Methane Propulsion Systems, Phase I Briefing Chart Image

Table of Contents

Project Introduction	1
Primary U.S. Work Locations and Key Partners	1
Images	2
Organizational Responsibility	2
Project Management	2
Technology Maturity (TRL)	2
Technology Areas	3
Target Destinations	3

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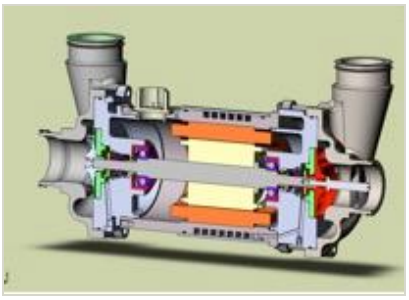
Images



Briefing Chart Image
Integrated Powerhead for Methane Propulsion Systems, Phase I Briefing Chart Image
(https://techport.nasa.gov/image/133180)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

TGV Rockets, Inc.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

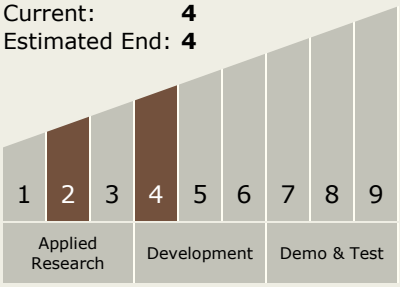
Carlos Torrez

Principal Investigator:

Earl W Renaud

Technology Maturity (TRL)

Start: **2**
Current: **4**
Estimated End: **4**



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Technology Areas

Primary:

- TX01 Propulsion Systems
  - TX01.1 Chemical Space Propulsion
    - TX01.1.3 Cryogenic

Target Destinations

The Moon, Mars, Outside the Solar System, The Sun, Earth, Others Inside the Solar System